

## **SPECIFICATION AMENDMENTS**

None

## **CLAIM AMENDMENTS**

### **Claim Amendment Summary**

#### **Claims pending**

- Before this Amendment: Claims 1-30.
- After this Amendment: Claims 1-8, 10-18, 20-28 and 30

**Non-Elected, Canceled, or Withdrawn claims:** 9, 19, 29

**Amended claims:** 1, 11, 21

**New claims:** none

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### **Claims:**

**1. (Currently Amended):** A method for handling a large data object in a computer system, said method comprising:

creating a handling structure comprising a reference to locate the large data object and information to return an interface to provide access to the large data object, wherein said handling structure has a lifetime, and said handling structure comprising a field having a value corresponding to said lifetime;

wherein said handling structure can be processed by said computer system, via functions, operations, and so forth available for a

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small data object, with which said large data object could not be so processed.

**2. (Original):** The method of claim 1 wherein a first handling structure pointing to a first large data object is virtually copied by the creation of a second handling structure that points to the same first large data object provided that the first handling structure and the second handling structure do not write a change to said first large data object.

**3. (Original):** The method of claim 2 wherein, if said first handling structure must write a change to said first large data object, said first large data object is copied to a second large data object and said second handling structure is pointed to said second large data object prior to the first handling structure writing the change to the first large data object.

**4. (Original):** The method of claim 2 wherein, if said second handling structure must write a change to said first large data object, said first large data object is copied to a second large data object and said second handling structure is pointed to said second large data object, and then said second handling structure will write the change to the second large data object.

**5. (Previously Presented):** The method of claim 1 wherein a data object having a type from among the group of types comprising text, ntext, and image data types is converted into a large data object with a corresponding handling structure.

**6. (Previously Presented):** The method of claim 1 wherein a data object having a type from among the group of types

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comprising\_text, ntext, and image data type is converted into a data object having a type from among the group of types comprising varchar(MAX), nvarchar(MAX), or varbinary(MAX) respectively wherein varchar(MAX), nvarchar(MAX), and varbinary(MAX) comprise a handling structure and the MAX corresponds to a predetermined maximum size value.

**7. (Original):** The method of claim 1 wherein said handling structure corresponds to a small value data object, and said small value data object is stored entirely within the said handling structure.

**8. (Original):** The method of claim 1 further comprising a delete operation for said handling structure, wherein if said handling structure is of a first type, said handling structure and a corresponding large data object are both deleted, and wherein if said handling structure is of a second type, only said handling structure, and not said corresponding large data object, is deleted.

**9. (Canceled)**

**10. (Original):** The method of claim 1 wherein said handling structure is created by a handling structure factory in response to a need for a handling structure.

**11. (Currently Amended):** A system for handling a large data object in a computer system, said method comprising:

a subsystem for creating a handling structure comprising a reference to locate the large data object and information to return an interface to provide access to the large data object, wherein said handling structure has a lifetime, and said handling structure comprising a field having a value corresponding to said lifetime;

wherein said handling structure can be processed by said computer system, via functions, operations, and so forth available for a small data object, with which said large data object could not be so processed.

**12. (Original):** The system of claim 11 wherein a first handling structure pointing to a first large data object is virtually copied by the creation of a second handling structure that points to the same first large data object provided that the first handling structure and the second handling structure do not write a change to said first large data object.

**13. (Original):** The system of claim 12 wherein, if said first handling structure must write a change to said first large data object, said first large data object is copied to a second large data object and said second handling structure is pointed to said second large data object prior to the first handling structure writing the change to the first large data object.

**14. (Original):** The system of claim 12 wherein, if said second handling structure must write a change to said first large data object, said first large data object is copied to a second large data object and said second handling structure is pointed to said second large data object,

and then said second handling structure will write the change to the second large data object.

**15. (Previously Presented):** The system of claim 11 wherein a data object having a type from among the group of types comprising text, ntext, and image data types is converted into a large data object with a corresponding handling structure.

**16. (Previously Presented):** The system of claim 11 wherein a data object having a type from among the group of types comprising text, ntext, and image data type is converted into a data object having a type from among the group of types comprising varchar(MAX), nvarchar(MAX), and varbinary(MAX) respectively wherein varchar(MAX), nvarchar(MAX), and varbinary(MAX) comprise a handling structure and the MAX corresponds to a predetermined maximum size value.

**17. (Original):** The system of claim 11 wherein said handling structure corresponds to a small value data object, and said small value data object is stored entirely within the said handling structure.

**18. (Original):** The system of claim 11 further comprising a delete operation for said handling structure, wherein if said handling structure is of a first type, said handling structure and a corresponding large data object are both deleted, and wherein if said handling structure is of a second type, only said handling structure, and not said corresponding large data object, is deleted.

**19. (Canceled)**

**20. (Original):** The system of claim 11 wherein said handling structure is created by a handling structure factory in response to a need for a handling structure.

**21. (Currently Amended):** A computer-readable medium comprising computer-readable instructions for handling a large data object in a computer system, said computer-readable instructions comprising instructions for:

creating a handling structure comprising a reference to locate the large data object and information to return an interface to provide access to the large data object, and processing said handling structure with functions, operations, and such other manipulations available for a small data object, with which said large data object could not be so processed, whereby said handling structure has a lifetime, and said handling structure comprising a field having a value corresponding to said lifetime.

**22. (Original):** The computer-readable instructions of claim 1 further comprising instructions whereby a first handling structure pointing to a first large data object is virtually copied by the creation of a second handling structure that points to the same first large data object provided that the first handling structure and the second handling structure do not write a change to said first large data object.

**23. (Original):** The computer-readable instructions of claim 2 further comprising instructions whereby, if said first handling structure must write a change to said first large data object, said first large data object is copied to a second large data object and said second handling

structure is pointed to said second large data object prior to the first handling structure writing the change to the first large data object.

**24. (Original):** The computer-readable instructions of claim 2 further comprising instructions whereby, if said second handling structure must write a change to said first large data object, said first large data object is copied to a second large data object and said second handling structure is pointed to said second large data object, and then said second handling structure will write the change to the second large data object.

**25. (Previously Presented):** The computer-readable instructions of claim 1 further comprising instructions whereby a data object having a type from among the group of types comprising text, ntext, and image data types is converted into a large data object with a corresponding handling structure.

**26. (Previously Presented):** The computer-readable instructions of claim 21 further comprising instructions whereby a data object having a type from among the group of types comprising text, ntext, and image data type is converted into a data object having a type from among the group of types comprising varchar(MAX), nvarchar(MAX), and varbinary(MAX) respectively, said varchar(MAX), nvarchar(MAX), and varbinary(MAX) types, comprising a handling structure type, and a MAX value corresponds to a predetermined maximum size value.

**27. (Original):** The computer-readable instructions of claim 1 further comprising instructions whereby, if said handling structure

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corresponds to a small value data object, said small value data object is stored entirely within the said handling structure.

**28. (Original):** The computer-readable instructions of claim 1 further comprising instructions for a delete operation for said handling structure, said delete operation comprising instructions whereby if said handling structure is of a first type, said handling structure and a corresponding large data object are both deleted, and further comprising instructions whereby if said handling structure is of a second type, only said handling structure, and not said corresponding large data object, is deleted.

**29. (Canceled)**

**30. (Original):** The computer-readable instructions of claim 1 further comprising instructions whereby said handling structure is created by a handling structure factory in response to a need for a handling structure.